

LIANG — 10/087,450  
Client/Matter: 046006-0272274

IN THE SPECIFICATION:

Please amend page 1, lines 3–5 as follows:

– This application claims the benefit of co-pending United States provisional application Serial No. [[60/\_\_\_\_,\_\_\_\_,]] 60/358,432, entitled “GRAPHICAL FRAME RATE CONTROLLER,” filed February 19, 2002. –

Please insert the following paragraphs at page 3, line 8:

– A frame rate control system according to one embodiment includes a buffer, a write control component configured to write data frames to the buffer at an image source signal frequency, and a read control component selectively operative to read the data frames from the buffer at a selected one of a plurality of display frequencies. Such a system may further include a detector operative to output a first signal responsive to a buffer overflow condition, and/or a second signal responsive to a buffer underflow condition, such that the selected one of a plurality of display frequencies is selected in accordance with the first or second signal. The read control component may be configured (e.g. by a frequency controller) to operate at the selected one of the plurality of display frequencies. In such manner, a dynamically adjustable frame rate control system as described herein may be achieved.

In another embodiment, a method of controlling a frame rate of a display signal for a destination video display device includes receiving an image source signal comprising source data, writing the source data to a buffer at a source frequency and updating a write pointer, reading the source data from the buffer at a display frequency and updating a read pointer, and comparing information related to the write pointer and information related to the read pointer. The method also includes, responsive to the comparing, detecting a buffer overflow condition or a buffer underflow condition and, responsive to the detecting, adjusting the display frequency in accordance with the detected condition by configuring a read control component to read the source data from the buffer at a selected one of a plurality of display frequencies supported by the destination video display device (e.g. a liquid crystal display). Such a method may also include identifying one of the plurality of supported display frequencies to correct the detected condition. In such manner, dynamically adjustable frame rate control as described herein may be achieved.--